pacific information resources\pleadings\sullivan and simple communications\decl of hadas cover page final as filed 02 28 0

 I, Ran Libeskind Hadas, Ph.D., state and declare as follows:

1. ABOUT THE AUTHOR:

- 1. I make this declaration under penalty of perjury, from my own personal knowledge, survey research I designed and conducted, and from my knowledge of records that I maintain or have reviewed in the ordinary course of my business. I have collaborated with my research assistant, Mr. Thomas Barr, in some of the analyses in this document.
- 2. I am a Full Professor of Computer Science and hold the Joseph B. Platt Endowed Chair at Harvey Mudd College. From July 1, 2007 to July 1, 2008, I am on sabbatical from Harvey Mudd College and a visiting scholar at the School of Information Technology at the University of Sydney, Sydney, New South Wales, Australia.
- 3. I received the A.B. degree in Applied Mathematics, *magna cum laude*, from Harvard University in 1987 and the M.S. and Ph.D. degrees in Computer Science from the University of Illinois at Urbana-Champaign in 1989 and 1993, respectively. The University of Illinois graduate program in Computer Science is ranked in the top 5 in the nation by U.S. News and World Report (U.S. News and World Report, 2006).
- 4. I have been on the faculty of Harvey Mudd College for 14 years. Harvey Mudd College is ranked as the #1 (best) undergraduate engineering program in the nation by U.S. News and World Report (U. S. News and World Report, 2007). My responsibilities include teaching, research, and professional service. I teach a variety of computer science courses ranging from introductory courses to advanced topics courses.
- 5. My research is in the area of computer networks and algorithms. I have published over 30 papers in peer-reviewed journals and conference proceedings, have served for two consecutive terms on the editorial board of the *IEEE Transactions on Computers* a flagship journal in computer science and computer engineering, and have held two endowed professorial chairs during my 14 years at Harvey Mudd College. I served as chair of the Department of Computer Science at Harvey Mudd College during academic year 2006-2007. I have received

several major grants from the United States National Science Foundation to support my research.

A complete curriculum vita is attached hereto and incorporated herein as Exhibit "1."

6. I was retained on this case on March 16, 2006. My hourly consulting rate is \$200 per hour.

2. SCOPE AND PURPOSE OF REPORT

- 7. This report documents my findings in the case of Pacific Information Resources, Inc., plaintiff, versus Airon Corp. Since the Airon websites have been changing over time, this report documents my findings over a period of several years.
- 8. Plaintiff Pacific Information Resources, Inc. owns a very popular website located on the Internet at www.searchsystems.net, henceforth referred to as "Search Systems WEBSITE." The Search Systems WEBSITE provides the user with a comprehensively organized catalog of links to a variety of websites that contain public records databases.
- 9. As part of the duties for which I was retained, I was asked to compare and contrast the various websites operated by Airon Corp. against the Search Systems **WEBSITE**. This task involved objectively and independently analyzing the various Airon websites.
- 10. As documented in this report, I conclude these websites are essentially identical and all copied a number of original and unique aspects of the Search Systems **WEBSITE**. First, Defendant Airon copied the content and organization of the Search Systems **WEBSITE**. Second, Defendant Airon uses the Search Systems trademark name on its own website. Third, Defendant Airon circumvented security measures employed by Search Systems in order to copy hyperlinks that were stored in a protected form.
- 11. Each form of copying (or theft) discussed in this report is abundantly evident in the CIS Worldwide, Restrictedonly, and several other websites owned by Airon Corp.

 Numerous examples (incidents) have been selected to demonstrate the breadth, depth and pervasiveness of Defendant's copying (or stealing).
- 12. In August 2006, I prepared a report in which the results of my analysis showed an extremely high degree of identical content in numerous websites operated by the various

defendants in this case. Moreover, my research and analysis indicated that with a high degree of probability, each of the defendant websites identified, obtained this "identical content" through some form of copying the content of www.searchsystems.net, which is owned/operated by Plaintiff Pacific Information Resources.

In November 2006, I prepared a Supplemental Report ("Second Expert 13. Declaration") that showed an extremely high probability of cooperation or collusion among a sub-group of defendants who own or operate the following the websites:

> www.instantdetective.org www.instantdetective.net www.recordsregistry.com www.records-registry.com www.websherlock.com www.restrictedonly.com www.cisworldwide.com

14. On January 25, 2007, I prepared a Second Supplemental Report (Third Expert Declaration) that shows with extremely high probability, that the collusion or cooperation among several of the defendants' websites, shown in the November, 2006 Supplemental Report, also extends to the following websites:

www.datahounddetective.com and www.courtsonline.org

- 15. On April 16, 2007, I prepared a Fifth Expert Declaration that compared the websites www.searchsystems.net with www.cisworldwide.com and www.restrictedonly.com. The comparisons were made on March 14, 2007.
- Today, August 28, 2008, I am submitting a Sixth Expert Declaration that 16. compares www.searchsystems.net to multiple websites owned by Airon and examines some of these sites over a period of several years.

3. PACIFIC INFORMATION RESOURCES, INC. D/B/A SEARCH SYSTEMS

17. Plaintiff Pacific Information Resources, Inc. owns a very popular **WEBSITE** called searchsystems.net, henceforth referred to as "Search Systems." The Search Systems

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WEBSITE provides the user with a comprehensively organized catalog of links to a variety of websites with public records databases.

- As of January 28, 2007, the Search Systems site contained over 40,000 links with 18. some links occurring multiple times, resulting in over 29,000 unique links. The **WEBSITE** is organized in categories by state, by country, and in several other ways. By selecting a few links on the Search Systems WEBSITE, a user can quickly identify the public records database of interest (e.g. a database on San Francisco County property taxes or a national database of federal criminal records).
- 19. The construction of a **WEBSITE** of this breadth and depth is a very significant achievement. The combined tasks of:
 - a. identifying and selecting relevant or useful sites of public records;
 - b. organizing them into a coherent catalog; and
- c. writing a brief description of each selected site, would take several human-years.
- 20. The Search Systems **WEBSITE** is extraordinarily popular. One objective measure is the Google page rank, a ranking between 0 and 10 indicating the popularity and importance of the WEBSITE, with 0 being the lowest and 10 being the highest. Google computes the page rank using a sophisticated algorithm. This ranking system is used to order the pages when a user enters a query on Google. Pages with higher page rank (popularity and importance) are displayed before pages with lower page rank.
- 21. The Google page rank of the Search Systems **WEBSITE** is currently 6 out of 10. This is the same as the rank of many major companies such as Sears (www.sears.com), J.C. Penney (www.jcpenney.com), among others.
- 22. When issuing the query "public records," Google reports that there are over 27 million web pages that match this query (as of January 28, 2008). The Search Systems WEBSITE is the very first link displayed in this list (with the exception of a few "sponsored links" that pay to have their sites appear first and they are explicitly highlighted as paid

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advertisements). Thus, among nearly 27 million "public records" WEBSITES Search Systems has earned the highest ranking from Google.

- 23. Other indicators of the success of the Search Systems WEBSITE abound. As of January 28, 2008, over 52 million "hits" (visits) were made to the Search Systems **WEBSITE**. Professor Sreenivasan Sree, a faculty member at the Columbia University Graduate School of Journalism, wrote in the July/August 2003 issue of the prestigious Columbia Journalism Review: The best site for finding public records is SearchSystems.net, with more than 15,200 searchable public-record databases, including records of unclaimed property, sex offenders, and legislative documents, to name a few. You can do nationwide or state-by-state searches, or visit the growing international section.
- 24. The size and success of the Search Systems **WEBSITE** is particularly amazing considering it is a small family-owned business.

4. TECHNOLOGICAL BACKGROUND AND DEFINITIONS

25. In this section I define a number of important terms and explain some of the key technologies related to this investigation.

4.1 Websites and Web Pages

- 26. A website is a repository of information for an individual, a company, or some other institution. A website is comprised of one or more web pages. Each web page is an electronic document which can be viewed on a client (i.e., the user's computer) with the use of a program called a "web browser," such as Internet Explorer, Netscape, or Safari. A website may have multiple web pages just as a shopping catalog has multiple pages.
- 27. The Search Systems **WEBSITE** comprises many pages. There are separate pages for each state, since each state has its own collection of public records databases. There are also web pages for several countries as well as numerous other categories of pages.

4.2 HTML

28. Web pages are commonly written in a special language called *HTML*, which stands for Hyper Text Markup Language. This language specifies exactly how the web page

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should look: what color the page should be, what pictures should be displayed and what text should appear on the page and where it should appear, and so forth. The term HTML code refers to the description of the web page in HTML.

4.3 Clients and Servers

- 29. A server refers to a computer containing some repository of information. A client refers to a computer requesting information from a server. Clients and servers interact through a network, typically the Internet. A client computer may be running a web browser such as Internet Explorer or Netscape. When the user at the client computer enters instructions through a keyboard, mouse or other input device to see a web page, the client computer obtains the web page from the appropriate server computer.
- 30. Search Systems maintains its **WEBSITE** on a secure server. I was able to access this server over the Internet using an account name and password provided by Search Systems. The server contains proprietary software developed by Search Systems and an enormous set of data comprising the catalog of links to public records databases worldwide.

4.4 Uniform Resource Locators (URLs)

- 31. Each web page has its own unique address called a *Uniform Resource Locator* or URL. When a user at the client computer enters a URL in a web browser, the URL is used to locate (1) the server that contains that web page; and (2) the actual specific web page on the server. That web page is then retrieved from the server and displayed on the client's web browser.
- 32. This process is illustrated in Figure 1. An individual using a client computer with a web browser is shown on the left. The user requests a particular web page by either typing a URL in the browser or by clicking on a hyperlink (described in more detail below). The web browser uses that URL to locate the server that contains the web page.

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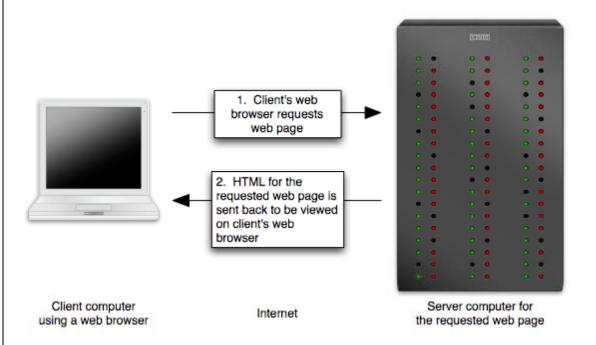
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Figure 1: A Request for a Web Page



33. A request for the web page is sent to the server over the Internet as shown in the upper box in the middle of Figure 1. The server locates the HTML code for the requested web page. The HTML code is then sent back to the client computer over the Internet. The web browser on the client computer then displays this HTML in a human-readable form.

4.5 Hyperlinks

34. Many web pages will have links to other web pages. For example, a web page on chocolate might have hyperlinks to the web pages of several different chocolate manufacturers. To the user, these links, called *hyperlinks*, appear as text. The text is often colored (typically blue) and sometimes underlined, to indicate to the user that clicking on this text will result in going to another web page. In the HTML document that describes this page, the text has an associated URL. When the user clicks on the text, the web browser goes to the address specified in that URL to obtain the new web page.

- 35. The Search Systems **WEBSITE** is effectively an enormous, comprehensively organized catalog of hyperlinks to public records databases. As of January 28, 2008, the Search Systems **WEBSITE** included over 40,000 hyperlinks.
- 36. In most websites, when a user clicks on a hyperlink, the corresponding web page is displayed on the user's web browser and the URL for that web page is displayed at the top of the browser. Search Systems, and many other **WEBSITES**, wish to keep proprietary the URLs of their hyperlinks. Thus, instead of the actual URL, the hyperlink on the Search Systems **WEBSITE** has a descriptive name or "label" and, in almost every case, a short description written by Search Systems. Otherwise, the contents of the Search Systems WEBSITE could be very easily replicated, either manually or using automated software tools called web crawlers.
- 37. For this reason, Search Systems has expended significant efforts to protect the URLs for their hyperlinks. The nature of these efforts is described in more detail later in this section.

4.6 Programs, Code, and Software

38. A program is a set of instructions that perform a task on a computer. There are numerous different programming languages. One of the most prevalent languages used today for managing websites is called *PHP*. This is the language used to manage the Search Systems **WEBSITE**. The terms *program*, *code*, and *software* are generally used interchangeably.

4.7 PHP

39. PHP is a programming language that is widely used by web developers to create web pages with dynamic content and to allow users (clients or consumers) to interact with databases on server computers. The relationship between PHP and HTML web pages is illustrated in Figure 2. An individual using a client computer with a web browser is shown on the left. The user requests a particular web page by entering a URL in the browser or by clicking on a hyperlink (which has an associated URL). The web browser uses that URL to locate the server that contains the web page. A request for the web page is sent to the server over the Internet as shown in upper box in the middle of Figure 2. The server locates the requested page.

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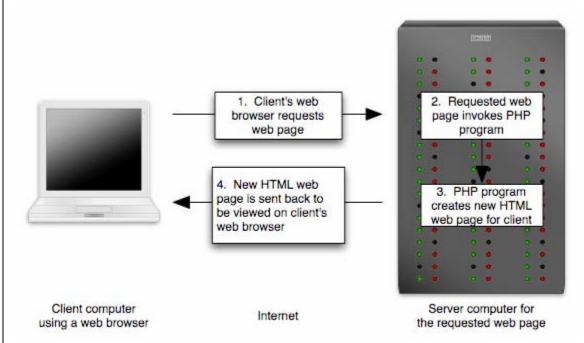
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Figure 2: A request for a web page involving a PHP program on the server.



- 40. If this page contains a PHP program, the PHP program is then invoked. The program runs on the server and creates new HTML code specifically for this request. That HTML code is then sent back to the client computer over the Internet. The web browser on the client computer then displays this HTML in a human-readable form.
- 41. Note that the PHP program creates new HTML code for the user's request. In other words, in contrast to having a single HTML page that all users would see when requesting this web page, we can now create a customized HTML page for each user's request. The Search Systems **WEBSITE** employs PHP to help protect its URLs from being copied. This is described in more detail in the next section.

5. THE SEARCH SYSTEMS WEBSITE

- 42. The Search Systems WEBSITE (www.searchsystems.net) is a very large and comprehensive public records directory developed, owned, and operated by Pacific Information Resources, Inc. (the "WEBSITE").
- 43. The Search Systems **WEBSITE** is, essentially, a carefully and discretely organized-catalog of hyperlinks to other websites that contain access to databases with public

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records. As of January 28, 2008, the Search Systems WEBSITE contained hyperlinks to over 40,000 public record databases. The website allows a user to quickly search by traditional categories (i.e., states, countries, provinces) as well as non-traditional categories whose names and parameters were developed by the Search Systems staff designers. These unique or original categories include, among others: Aviation, Campaign Contributions, Export Control, Missing, Most Wanted, and Recalls.

- 44. The original Search Systems Website was written in HTML in 1997. A Search Systems web page would have many hyperlinks to other **WEBSITE** containing public records databases. Each hyperlink was a simple URL and when the user clicked on that hyperlink, the user would be redirected to that **WEBSITE**. The user would then see the URL in the browser. In this way, the hyperlinks that Search Systems initially catalogued were easily obtained by even a casual user. Moreover, software systems known as "web crawlers" could automatically extract all of these links in very short order.
- 45. Beginning in 2001, several years before any of Defendants' websites were registered, Search Systems employed several technologies to inhibit the copying of its hyperlinks. The current Search Systems site "hides" or "masks" hyperlinks in two ways: First the **WEBSITE** employs a special web page feature called "frames." A user of the Search Systems **WEBSITE** can click on a hyperlink of interest, such as a site labeled "Court Records -Superior Courts" for the state of Washington. Rather than simply redirecting the user to that website and exposing the URL for it, the Search Systems WEBSITE uses the "frames" concept to create a "web page within a web page."
- 46. A screen shot indicating how this appears in a web browser is shown in Figure 3. At the top we see the URL displayed by the browser. This URL is not the URL for the "Superior Courts" web page, but rather Search System's own encoded URL. Immediately below the URL

I independently verified the information concerning the history of the Search Systems **WEBSITE**. In some instances, I carefully reviewed documentation provided by Search Systems.

is a "frame" that displays Search System's own logo or "banner". The lower part of the page contains a second "frame" containing the "Superior Courts" **WEBSITE** selected by the user.

Figure 3: Using Frames to Hide URLs



- 47. Using frames permits the Search Systems Website to display Search System's own URL in the browser instead of the URL of the page requested by the user. This is a well-known technique for hiding or masking URLs and is known in the web developer community as "address masking."
- 48. Second, in addition to using frames, Search Systems uses a more sophisticated means of protecting the URLs for its hyperlinks. Specifically, Search Systems has gone to considerable effort to transform the original HTML-based **WEBSITE** into one that is based on the PHP programming language, in large part to protect or mask Search Systems' URL hyperlinks.
- 49. In the current Search Systems Website, when a user clicks on a hyperlink that hyperlink is not simply the URL of the resource being requested (which could easily be seen and copied by the user). Instead, the hyperlink is a special encrypted proxy for the actual URL.

- 50. When the user clicks on the hyperlink, the encoded proxy hyperlink is sent to the Search Systems server. The proxy is then sent to a database on the Search Systems server to obtain the actual URL for the requested site.
- 51. This process of taking an encrypted proxy URL and querying the database to find the corresponding actual URL is performed by a program written in the PHP programming language. This PHP program was written by Search Systems specifically for the purpose of protecting its links from theft.
- 52. In order to further protect its links from theft, Search Systems chose to use proxy names for the URLs that are very difficult to decode. For example, using proxy names that are very similar to the original URLs would provide relatively little additional security. Therefore, the encoded proxy hyperlinks on the Search Systems **WEBSITE** are constructed using a very secure cryptographic encryption algorithm called "MD5". For example, the encoded address used by Search Systems for the "Superior Courts" web page in the example above is this: a5346e112e537adc074019265768d168.
- 53. This is an encryption that looks nothing like the original URL. This secure code appears on the web browser instead of the actual URL for the public records database requested by the user.
- 54. For example, when a user of the Search Systems **WEBSITE** clicks on the link for "Court Records -Superior Courts," the user sees the URL below in the browser: http://www.searchsystems.net/forward.php?id=a5346e112e537adc074019265768d168&nid=56
- 55. This is not the actual URL of the public records database, but rather a proxy URL representing Search System's own encryption of the actual URL. This mechanism is clearly designed as an effort to protect the links on the Search Systems **WEBSITE.** Although there are frequently ways of circumventing a software security mechanism, some effort is required to do so. The evidence here shows that Search Systems made efforts to inhibit the copying of its links.

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6. SEARCHSYSTEMS VS. AIRON CORP. WEBSITES ANALYSIS AND **COMPARISON**

56. In reviewing documentation obtained through my own web-based research, I confirmed that the Search Systems WEBSITE was first launched in 1996 and hosted on www.earthlink.net. In 1998, the website established its own domain name, www.pac-info.com. The current domain name, www.searchsystems.net, was created on June 7, 1999.

57. Airon Corp. operates many very similar websites. Table 1 provides a list of some of the websites owned or affiliated with Airon Corp. This data was provided to me by Search Systems.

Table 1: Websites owned by Airon Corp.

URL	Registrant	Date Registered
Net-investigator.org	Matthew Betourney	21-Nov-2006
	855 Morgan Road	
	Salisbury, VT 05769	
	Forwards to web-investigator.org (Airon)	
court-record.org	Domains by Proxy, Inc.	14-Nov-2005
	(Airon site – username 2004, pw1000)	
courtrecordssearch.org	Oneandone Private Registration	08-Jun-2006
_	Forwards to courtrecords.org (Airon)	
criminalrecordssearches.org	Oneandone Private Registration	17-May-2006
-	Forwards to courtrecords.org (Airon)	
publicrecordssearches.org	Oneandone Private Registration	08-Aug-2006
	Forwards to civilrecords.org, an Airon site.	
civil-records.org	Oneandone Private Registration	11-Mar-2006
C	(Airon site – username 2004, pw 1000)	
arrestrecordssearch.org	Oneandone Private Registration	06-Jun-2006
	(Airon site – username 2004, pw 1000)	
countyrecordssearch.org	Oneandone Private Registration	06-Jun-2006
	(Airon site – username 2004, pw 1000)	
legal-files.org	Oneandone Private Registration	04-Mar-2006
	(Airon site – username 2004, pw 1000)	
marriage-files.org	Domains by Proxy, Inc.	31-Dec-2005
	(Airon site – username 2004, pw 1000)	
	Oneandone Private Registration	24-May-2006
searchdivorcerecords.org	Forwards to courtrecords.org (Airon)	
court-record-online.org	Amit Mehta	03-Jun-2006
	Forwards to courtrecords.org (Airon)	
search-publicrecords.org	Oneandone Private Registration	09-Nov-2006
	Forwards to courtrecords.org (airon)	

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	Eliminous	NIMC Online (Airea)	20 IAN 05
	Elimiware.com	NMG Online (Airon)	20-JAN-05
	CriminalRegistry.org	CIS Worldwide	10-Nov-2006
; -	Official-Court-Records.org	Jeffrey Roth Roth International	06-Nov-2006
		210 Mayfield CT.	
		Madison, NJ 07940	
		Forwards to courtrecords.org (Airon)	
	courtsrecords.org	Scott Howard	26-Aug-2005
	_	(Airon site – username 2004, pw1000)	
	courtrecordsandreports.org	Oneandone Private Registration	09-Nov-2006
		Forwards to courtrecords.org (Airon)	
	governmentrecordssearch.com	Oneandone Private Registration	24-Dec-2006
		(Airon site – username 2004, pw 1000)	00.31 2006
	publicrecordslistings.org	Oneandone Private Registration	09-Nov-2006
	courtlegalrecords.com	(Airon site – username 2004, pw 1000)	19 Cars 05
	cournegairecords.com	Domains by Proxy, Inc. Forwards to courtrecords.org (Airon)	18-Sep-05
	www.court-records.org	Domains by Proxy, Inc.	09-May-2006
	www.court-records.org	Forwards to courtrecords.org (Airon)	09-Way-2000
	court. reverserecordsonline.org	N/A:wr5mt447	18-Jun-2006
	court to verser ees as on the court	(Airon site – username 2004, pw 1000)	10 0001 2000
	public.reverserecordsonline.org	No owner listed.	18-Jun-2006
		Forwards to searchpublicrecords.org, an Airon	
		site.	
		www.revereserecordsonline.org is misleading	
		– Linden Group	
	reverserecordsonline.org	No owner listed.	18-Jun-2006
		Public. reverserecordsonline.org forwards to	
		searchpublicrecords.org, an Airon site.	
		www.revereserecordsonline.org is misleading – Linden Group – anxiety disorders	
		(Ad for Linden Group on home page)	
	court-records-search.org	RegisterFly.com, Inc. (R1368-LROR)	05-May-2006
		Forwards to courtrecords.org (Airon)	30 3:33, 2000
	thecourtrecords.com	Ian Wilcox	13-Nov-06
		28 Priston Close, North Worle	
		Weston Super Mare, North Somerset	
		BS227FL	
		(Airon site – username 2004, pw 1000)	
	Governmentregistry.org	CIS Worldwide (Airon)	03-Nov-2006
	Federal-Records.org	CIS Worldwide	07-Jun-2007
	CourtRegistry.org	CIS Worldwide	10-Nov-2006
	natdir.com	Smyth, James	20-Jan-2006
		Forwards to seizedrealestate.com, an Airon	
	InfaD a sister and	site - username 2004, pw 1000	20 E-1-07
	InfoRegistry.org	Areg Sakanyan	20-Feb-07
		Modeling Group 12 Riverside St. Apt 1-1	
		Watertown, Massachusetts 02472	
	backgroundrecords.org	NMG Online (Airon)	28-Nov-2005
	<u>ouckgroundrecords.org</u>	14.15 Online (11101)	20 1101-2003
	Bargainsherlock.com	NMG Online (Airon)	07-Jun-05
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1	Cisworldwide.com	CISWORLDWIDE.COM	29-Dec-05
2	Cisworidwide.com	P.O. Box 821650 Vancouver, WA 98682	29-Dec-03
3	<u>civilfiles.com</u>	NMG Online (Airon)	27-Nov-05
Ļ	civilrecords.org	NMG Online (Airon)	28-Nov-2005
5	courtrecords.org	NM Group (Airon)	28-Jun-2004
5	credithistory.org	Airon Corp	22-Jun-2004
,	criminalfiles.org	NMG Online (Airon)	08-Nov-2005
3	Intelispy.com investigate123.com	NMG Online NMG Online (Airon)	31-Oct-05 01-Dec-05
)	Locateclassmates.org	NMG Online (Airon)	15-Sep-2005
)	Locatepeople.org	NMG Online (Airon)	27-Dec-2005
1	repoautos.org	NM Group (Airon)	20-Dec-2005
2	Repojewelry.com	NMG Online (Airon)	30-Mar-04
3	reversegenie.com	NMG (Airon)	13-Jan-06
4 5	Restrictedonly.com reversemobile.com	NMB (Airon) REVERSEMOBILE.COM P.O. Box 821650 Vancouver, WA 98682 Same IP address as Airon sites	01-Aug-05 07-Feb-06
7	reverserecords.org	(Airon site – username 2004, pw 1000) NM Group (Airon)	24-Aug-2005
3	Rmvrecords.org	NM Group (Airon)	20-Dec-2005
)	searchpublicrecords.org	NMG Online (Airon)	27-Sep-2006
1 2	Seizedelectronics.com	SEIZEDELECTRONICS.COM P.O. Box 821650 Vancouver, WA 98682 Same IP address as Airon sites (Airon site – username 2004, pw 1000)	30-Mar-04
3 4 5	seizedrealestate.com	SEIZEDREALESTATE.COM P.O. Box 821650 Vancouver, WA 98682 Same IP address as Airon sites (Airon site – username 2004, pw 1000) See: http://www.ripoffreport.com/reports/ripoff144	30-Mar-04
5 7	stateauctions.org	331.htm NM Group (Airon)	12-Mar-2005

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1	Webinvestigator.org	NMG Online (Airon)	21-Jan-2005
2	webstigate.com	Oneandone Private Registration (Airon site – username 2004, pw 1000)	03-Dec-2004
3	Instantbackgroundreport.com	INSTANTBACKGROUNDREPORT.COM	02-Aug-06
4	mstantoackgroundreport.com	P.O. Box 821650 Vancouver, WA 98682	02-Aug-00
5			
	SSNRecords.org	CIS Worldwide	17-Apr-2007
6	StateRegistry.org	CIS Worldwide	04-Nov-2006
O	webinvestigator9.org	Domains by Proxy, Inc.	09-Sep-2005
7		Forwards to webinvestigator.org (Airon)	
,	<u>cheapcarfinder.com</u>	NMG Online (Airon)	30-Mar-04
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58. Many of these websites are identical. This is initially evident simply from the text appearing in the banners at the tops of each of the websites. For example, Figure 4 shows a screenshot from CIS Worldwide, Figure 5 shows a screenshot from Restrictedonly, and Figure 6 shows a screenshot from Webinvestigator. Note that all of these websites contain the name "Complete Investigation Services" and the subtext and "One-Stop Source For All Your Information Needs".

Figure 4: Banner from CIS Worldwide showing the text "Complete Investigation Services" and "One-Stop Source For All Your Information Needs"

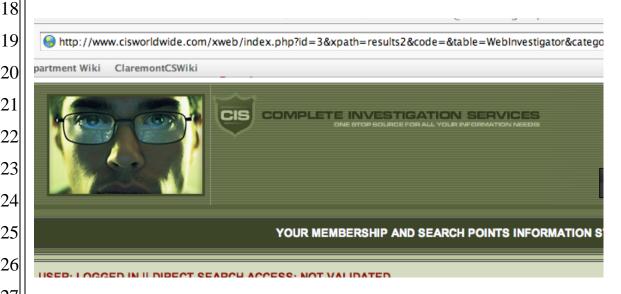


Figure 5: Banner from Restrictedonly showing the text "Complete Investigation Services" and "One-Stop Source For All Your Information Needs"

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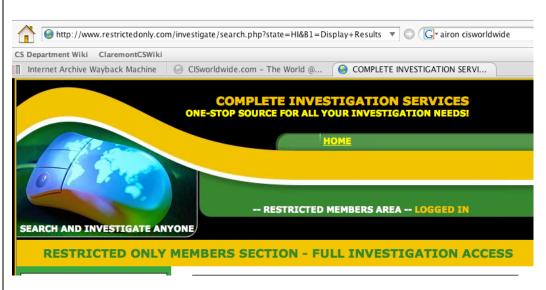


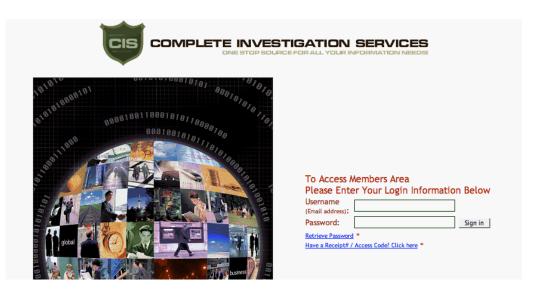
Figure 6: Snapshot from bottom of the Webinvestigator page showning the text "Complete **Investigation Services" and "One-Stop Source For All Your Information Needs"**



© Copyright 2006 WebInvestigator.org. All Rights Reserved. © - XWEB - Version: Full 1.0

59. Most of these websites are, in fact, simply proxies that redirect the user to a single website: CIS Worldwide. To demonstrate this, I purchased an account at CIS Worldwide and received a username and password. I was then able to use this account to logon to the multitude of other Airon websites (e.g. www.stateregistry.org www.investigate123.com, www.search-publicrecords.org, www.courtrecords.org, etc.) In fact, a request to login to any of these sites simply redirects the user to the same common login page show in Figure 7. Once the username and password are entered, the user is redirected to the CIS Worldwide website. In other words, these websites are simply proxies for CIS Worldwide.

Figure 7: The common login page used by most Airon websites.

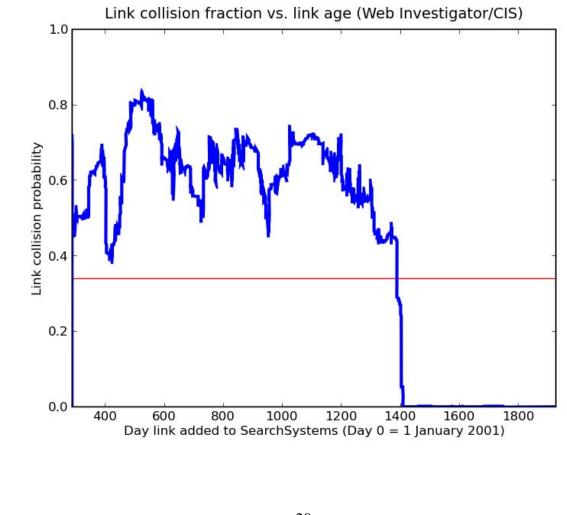


- 60. Having established that these Airon websites are essentially identical to one another, I now summarize the similarities between representative Airon websites (e.g. CISworldwide and Restrictedonly) and the Search Systems **WEBSITE** that I have observed in several studies that I have conducted since I was retained on this case.
- 61. Multiple studies of the Airon websites have been necessary since these websites have been changing over time. Some of these changes are cosmetic while others involve the addition or deletion of links and some reorganization.
- 62. I begin with a retrospective study that examines CIS Worldwide from November 2005, using a "mirror" (or "snapshot") of that website provided to me by Search Systems. This study was performed in January 2008 with the assistance of Mr. Thomas Barr, a senior engineering student at Harvey Mudd College, a researcher at The Aerospace Corporation, and himself the developer of a popular website.

- 63. We designed and implemented several computer programs, or "analysis tools", to help us understand the Search Systems **WEBSITE** and the CIS Worldwide website and determine how much, if any, overlap existed between these sites over time.
- 64. These tools showed that there are currently 29,916 unique links in the Search Systems **WEBSITE**. They also show that there were 11,462 unique links on the CIS Worldwide website when the mirror was created in November 2005. Of these links on the CIS Worldwide website, 10,143 also appear on Search Systems. In other words, 88.4% of the content on defendant CIS Worldwide 's WEBSITE also appears on the plaintiff database.
- 65. One might postulate that such a high level of similar links is normal or expected. We tested this hypothesis, using an analytical technique described below, and determined that the probability that CIS Worldwide did not copy links from Search Systems is effectively zero.
 - 66. We now describe the methodology and results of our analysis.
- 67. The Search Systems database contains the date that a given link was first added to the Search Systems **WEBSITE**. The first dates given are for late 2001, and over the next four and a half years, 29,916 links were slowly added through careful research. 10,143 of these links appear on CIS Worldwide.
- 68. If the links on CIS Worldwide were assembled independently of Search Systems, this would mean that the probability of any given link on Search Systems also appearing on CIS Worldwide would be approximately 0.34 (10,143 links common to CIS Worldwide divided by 29,616 links on the Search Systems **WEBSITE**), independent of when that link was added to Search Systems. In actuality, the commonality between the Search Systems and CIS Worldwide sites is very much higher than this for links added to Search Systems until around November 1, 2004, and virtually zero for links added after this date. This result is a strong indication that a large quantity of content was copied from Search Systems around early November 2004.
- 69. We constructed a tool that analyzed each link in the Search Systems **WEBSITE** according to when that link was introduced in the Search Systems **WEBSITE**. This tool allows us to visualize the probability that a link on the Search Systems **WEBSITE** would also appear on

the CIS Worldwide website. (More details of the tool are provided in Technical Appendix A). If CIS Worldwide introduced the links independently, we would expect that the probability would remain constant at 0.34 over time, indicated by the horizontal red line in the graph in Figure 8. However, as shown in Figure 8, this is not the case. Instead, the probabilities (shown in blue) are much higher than this "independently designed website hypothesis" would explain, then drop precipitously to nearly zero probability in November 2004. While the "independently designed website hypothesis" would predict around 5,700 links in common for this period we only see four! The probability of this occurring is very close to zero.

Figure 8: Collision Probability vs. Link Age



- 70. Specifically, the probability of this occurring through random chance can be calculated using the binomial distribution's cumulative distribution function (http://mathworld.wolfram.com/BinomialDistribution.html). The probability of as few as ten sites added to Search Systems after November 2004 also being in CIS Worldwide, if individual links appear with a random probability of 0.34, is one in *a number with over three-hundred digits*. This is a probability low enough to be effectively zero. We are forced to conclude that CIS Worldwide was, *with near certainty* developed using data from Search Systems.
- 71. This graph indicates that the CIS Worldwide site was started by copying a very large portion of the Search Systems site in late October 2004, and then was developed independently from that point on. Since links were copied all at once, links added to the Search Systems site after the copying appear on the CIS Worldwide site infrequently, as observed. This explains why only four links from that period appear on both sites. *In other words, CIS Worldwide's foundations originated by copying the contents of the Search Systems WEBSITE.*By copying links off of the Search Systems WEBSITE, CIS Worldwide has copied the unique and creative selection performed over many years by the defendants.
- 72. Next, I summarize some of the findings from August 2006 documented in my first declaration. In that report, I examined the Airon websites Restrictedonly and CISworldwide and compared them to the Search Systems**WEBSITE** at that time. My findings strongly indicated while the Airon websites had diverged somewhat from the Search Systems**WEBSITE** over time, there was still very significant signs of earlier copying.
- 73. For example, the first four categories on the Search Systems **WEBSITE** "U.S. Nationwide" category are named "Adoptions," "Associations/Directories," "Attorneys," and "Aviation". The first four categories of the Restrictedonly website are "Adoption Info", "Aircraft/Aviation", "Association Directories", and "Attorney Resources". A screenshot from the Search Systems **WEBSITE** is shown in Figure 9 and a screenshot from Restrictedonly is shown in Figure 10.

Figure 9: Snapshot from Searchsystems

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Adoptions

U.S. Nationwide v

Associations / Directories

Attorneys

Aviation

Figure 10: Snapshot from Restrictedonly



74. Further evidence of copying from the Search Systems **WEBSITE** is found in the choice of esoteric specific links. Amidst a large collection of utilitarian resources, the Search Systems **WEBSITE** includes a sprinkling of humorous links that are "not like the others" and are of no practical value. For example, the Search Systems WEBSITE "General/Miscellaneous" category contains 221 links, a small number of which are clearly intended for levity. One of these is titled "Payphones News".

75. The "Payphone News" website is not a public records database and its inclusion on the Search Systems **WEBSITE** is arbitrary. The designers of the Search Systems **WEBSITE** could have just as easily included websites on "stamp collecting" or "kites" (topics

that are quantifiably much more popular than payphones based on the number of websites matching these terms using a Google search).

- 76. **Restrictedonly contains a link to this same payphone site.** Considering the astronomical number of websites that could have been placed in the "Miscellaneous" categories, this is a "smoking gun" demonstrating copying of content by Restrictedonly.
- 77. Another example of an entirely incongruous link in the Search Systems

 WEBSITE is to the "Habenero Hamburger 'Hall of Flame'". This light-hearted website honors those individuals who consumed large quantities of a particularly spicy hamburger served at a pub in San Mateo, California. The pub has been out-of-business for several years. This site does not contain any databases and is completely unrelated to the various public databases listed on the Search Systems WEBSITE for San Mateo.
- 78. **CIS Worldwide contains a link to this same hamburger site.** While this in itself is strong evidence of copying from Searchsystems, even more incriminating is the fact that CIS Worldwide provides a description for this link that is almost identical to the one used by Searchsystems: The original Search Systemsdescription is "San Mateo Habenero Hamburger Survivors" and the description at CIS Worldwide is "San Mateo Habenero Hamburger Survivors". The only difference is the dash. One might conjecture that CIS Worldwide has the same link description because the words "San Mateo Habenero Hamburger Survivors" actually appears on the Habenero website. However, this is not the case and thus it is almost certain that CIS Worldwide simply appropriated the link descriptor that was written by Searchsystems.
- 79. I subsequently reexamined Restrictedonly website, along with the CISworldwide website, on March 14, 2007 and summarize those results next.
- 80. Restrictedonly, CISworldwide, and Search Systems all contained links organized on a state-by-state basis. For example, Figure 11 shows the first few links from Searchsystem's Hawaii Licenses page and Figure 12 shows the first few links from the Restrictedonly Hawaii page. Note that the links are identical.

81. The correspondence between the links on Restricted only and Search Systems is pervasive. Of the 185 links on the Restricted only Hawaii section, 152 are identical to those on Searchsystems' Hawaii pages. *This constitutes over 82% identical links*. An examination of other parts of the Restrictedonly website suggests that these similarities appear in abundance and that the Hawaii example is reasonably representative of a pattern of the verbatim similarity in links.

Figure 11: Snapshot from Search SystemsHawaii page

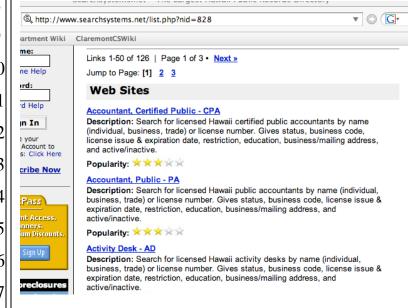


Figure 12: Snapshot from Restrictedonly Hawaii page



- 82. An examination of CISworldwide on April 16, 2007 reveals that some links on that website had been deactivated around that time and that efforts had been made to hide evidence of wholesale copying, although copying is still easily discovered with only modest effort.
- 83. For example, consider the "Missing Persons" category at CISworldwide. Until recently, this page looked like the snapshot taken on January 16, 2007 and shown in Figure 13.

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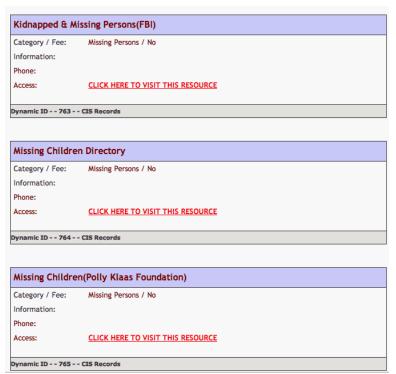
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Figure 13: Snapshot of "Missing Persons" page from CISworldwide on January 16, 2007



- 84. This page at CIS Worldwide site contains 10 links that are exactly identical to the 10 links in the Search Systems" Missing category page.
- 85. There were approximately 1.18 million websites on April 16, 2007 that matched the search "missing persons" when using Google. The probability that CIS Worldwide independently selected 10 of these sites and they happen to be the same 10 sites as on the Search Systems **WEBSITE** is very close to 0. This is indeed another "smoking gun" indicator of verbatim copying of links from the Search Systems WEBSITE.
- 86. By April 16, 2007, the "Missing Persons" page had been changed as shown in the snapshot in Figure 14.

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Figure 14: Snapshot of "Missing Persons" page from CISworldwide on April 16, 2007





87. This page has links that look rather different from those on the Search Systems **WEBSITE.** At first glance, this appears to differentiate CIS Worldwide from Search Systems. However, when we click on the third link on this page, we are taken to a page that is identical to the one from January 16, 2007 and has identical links to those on the Search Systems WEBSITE. Thus, it appears that some efforts have been made at this point to mask some of

the evidence of copying, although the evidence is still present.

- 88. For each link, Search Systems provides a short name and description for that link. For example, Search Systems provides the name "Missing Children – Vanished Childrens Alliance" to describe one link. These names were generated by Search Systems to provide the user with a concise descriptor of the link.
- 89. CIS Worldwide uses the same, or very similar, link descriptors. For example, where Search Systems uses the descriptor "Missing Children – Vanished Childrens Alliance", CIS Worldwide uses the descriptor "Missing Children (Vanished Childrens Alliance)". It is

notable that an apostrophe is missing in both cases (i.e. "Children's"), although an apostrophe is used on the Vanished Childen's Alliance website. This is one of many examples of typographical errors that were made by Search Systems and then copied by CIS Worldwide. (Other examples are described later in this report.)

- 90. Similarly, Search Systems has a link with the descriptor "Missing Persons NMCO". CIS Worldwide has a descriptor "Missing Persons (NMCO)". It is notable that the term "Missing Persons" does not actually appear anywhere on the NMCO website. These are representative examples of the copying of original information generated by Search Systems to aid its customers in navigating through an enormous collection of links.
- 91. I also examined the CISworldwide mirror site from October/November 2005 against the Restrictedonly and CIS Worldwide sites of March 14, 2007. I found that in most categories, there had been few or no changes over that period of time. For example, for the state of Hawaii category, CIS Worldwide had the same 185 links in October/November 2005 as on Restrictedonly on March 14, 2007.
- 92. Another clear indication of infringement is evident from the fact that several typographical errors on the Search Systems **WEBSITE** are also present on the CIS Worldwide website, as mentioned earlier.
- 93. On the Search Systems **WEBSITE**, each link is associated with a name, something to allow a user to know which link to select. These names are usually short phrases, such as "Maricopa County Deadbeat Parents". These names are written by the site creator. A software analysis tool was created to examine these names.
- 94. Of the 20,197 links in CIS Worldwide with names that also appear in Search Systems (this number is larger than the number of links used in the previous section due to the fact that some links have more than one name, and are therefore counted more than once here), 1,087 of them have names that are identical, down to punctuation, capitalization and spelling. Careful examination of these names in common reveals that this cannot be described through mere coincidence. Many of the common names are misspelled on both sites, which is extremely

unlikely for independently developed content. Two of these misspellings, "eligibility" and "comprensive" are reviewed in detail here as examples, but there are numerous others.

95. One link that is in common between the CIS Worldwide WEBSITE and the Search Systems **WEBSITE** is the TennCare Patient site. This site explains program eligibility, however the word eligibility is misspelled "eligibility" by both sites, as shown in the screenshots in Figures 15 and 16.

Figure 15: TennCare link on CIS Worldwide



Figure 16: TennCare link on Search Systems

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TennCare Patient Eligibilty | pay site

Description: Subscribers to TennesseeAnytime r

Popularity: *****

Trademarks

Description: Search by made name for Trademarks
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96. This is a relatively uncommon typographical error. This error is not made on the TennCare site, nor anywhere else on the Internet referring to the TennCare site. A Google search

for the word "eligibilty" receives 2000 times fewer hits than one for the correct spelling of "eligibility", so the probability of the CIS Worldwide creators making the same mistake is reasonably estimated at roughly one in 2000.

97. Similarly, comprehensive is misspelled as "comprensive" on both sites for the link to the "Martin County Comprehensive Plan", as shown in Figures 17 and 18. The name has been changed on the CIS Worldwide site in an attempt to hide the copying, however the typographical error was not fixed. A similar search reveals that this is a roughly one-in-a-thousand typographical error. Again, this error does not appear on the linked site.

Figure 17: Martin link on CIS Worldwide



Figure 18: Martin link on Search Systems



98. Having two different typographical errors common to the two websites is
extraordinarily unlikely. When the probabilities of both typographical errors are combined, the
odds of both sites making those same two mistakes on a carefully reviewed site becomes
approximately one in two million, virtually impossible to explain as coincidence. Other
typographical errors common to both sites include "Physician Asstants", "Marriages from
Virginia Newpaper" and "Death Certificiates", which decreases the likelihood of coincidence to
essentially zero.

99. Finally, I examined a number of additional websites provided to me by the Plaintiff. The websites that I examined are:

www.criminalfiles.org
www.investigate123.com
www.legalfiles.org
www.locateclassmates.org
www.locatepeople.org
www.reversegenie.com
www.reverserecords.org
www.rmvrecords.org
www.searchpublicrecords.org

Each of these websites is a "shell" or proxy for CIS Worldwide; each of these websites looks different on the first page, but when the user wishes to login to use the website, the user is immediately redirected to the www.cisworldwide.com website. In other words, each of these websites is simply a different name for the www.cisworldwide.com website.

100. In addition, I examined three other websites that were provided to me by the Plaintiff. The websites that I examined are:

www.repoautos.org www.seizedrealestate.com www.stateauctions.org

These websites all have the name "Restrictedonly.com" appearing on them.

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PROOF OF SERVICE

I am employed in the County of Orange, State of California in the office of a member of the Bar of this Court at whose direction this service was made. I am over the age of 18 and not a party to the within action; my business address is: **4631 Teller Avenue**, **Suite 140**, **Newport Beach**, **California 92660**.

On February 28, 2008, I served the foregoing document described as:

DECLARATION OF EXPERT RAN HADAS, Ph.D. IN SUPPORT OF PLAINTIFF'S APPLICATION FOR DEFAULT JUDGMENT BY COURT

on the interested parties in this action by placing \square the original \boxtimes a true copy thereof enclosed in a sealed envelope addressed as follows:

SEE ATTACHED SERVICE LIST

XX BY MAIL: I deposited such envelope in the mail at Irvine, California. The envelope was mailed with postage thereon fully prepaid. I am "readily familiar" with the firm's practice of collection and processing correspondence for mailing. It is deposited with the United States Postal Service on that same day in the ordinary course of business. I am aware that on motion of party served, service is presumed invalid if postal cancellation date or postage meter date is more than one (1) day after date of deposit for mailing in affidavit.

BY PERSONAL SERVICE: I caused such envelope to be delivered by hand to the addressee at the address on the attached Mailing List.

BY FEDEX: I deposited such envelopes at Irvine, California for collection and delivery by Federal Express with delivery fees paid or provided for in accordance with ordinary business practices. I am "readily familiar" with the firm's practice of collection and processing packages for overnight delivery by Federal Express. They are deposited with a facility regularly maintained by Federal Express for receipt on the same day in the ordinary course of business.

BY FACSIMILE: I transmitted the foregoing document by facsimile to the party(s) identified above by using the facsimile number(s) indicated. Said transmission(s) were verified as complete and without error.

BY INTERNET/E-MAIL: I transmitted the foregoing document by e-mail to the party(s) identified above by using the Internet Protocol Addresses indicated. Said transmission(s) were verified as complete and without error.

BY INTERNET/E-MAIL WITH CLERK OF THE COURT: I certify that on 2007, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system which will send notification of such filing as indicated on the attached Mailing List.

I certify and declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

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Declaration of Expert Ran Hadas, Ph.D. in Support of Application for Default Judgment by Court

Case 3:07-cv-04131-MMC Page 35 of 36 Document 28 Filed 02/28/2008 Executed on February 28, 2008 at Irvine, California. /s/ J. Renée Nordyke Declaration of Expert Ran Hadas, Ph.D. in Support of Application for Default Judgment by Court Case No. CV-07-4131 pacific information resources\pleadings\sullivan and simple communications\decl of hadas cover page final as filed 02 28 08

Document 28 Filed 02/28/2008

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